

Research and Reviews: Journal of Medical and Health Sciences

Breast Cancer & Types: A Review of Literature

Satya Srinivas V*

Department of Pharmaceutical Sciences, Andhra University, Visakhapatnam, India

Review Article

Received: 01/08/2016

Accepted: 01/08/2016

Published: 08/08/2016

*For Correspondence

Satya Srinivas V, Department of Pharmaceutical Sciences, Andhra University, Visakhapatnam, India, Tel: 040 474802295.

E-Mail: srinivas.vepa@gmail.com

Keywords: Breast cancer; Malignant, Metastasis, Benign, Chemotherapy, Radiotherapy.

ABSTRACT

Cancer is well recognized as the world's unhealthiness from many years till date. It outlined as assortment of ill-healths or abnormalities resulted from uncontrolled cell proliferation, violating the biological process rules and spreads to the encompassing tissues. Various specific signals dictate the biological process in healthy cells, whereas the cancer cells develop a degree of autonomy leading to uncontrolled proliferation resulting in neoplasm development. Most of the cancer connected deaths are found to be because of spreading of neoplasm cells to different body components, a phenomenon known as metastasis.

Breast cancer is one among the foremost common cancers diagnosed in girls worldwide. It is the second most frequent reason for death because of cancer in girls. It is one amongst the foremost common malignancies in girls and represents the second highest reason for cancer mortality.

INTRODUCTION

Breast cancer initiates cells within the breast tissues to grow out of management. The growth is malignant (cancerous) if the cells will grow into (invade) close tissues or unfold (metastasize) to distant areas of the body. Carcinoma happens nearly entirely in ladies; however men will latch on, too.

Cells in nearly any a part of the body may become cancerous, and might unfold to different areas of the body. Breast cancers can begin from totally different elements of the breast. Most common types of breast cancers start within the ducts that carry milk to the sex organ (ductal cancers). Some begin within the glands that create breast milk (lobular cancers). A small variety of cancers begin in different tissues within the breast. These cancers area unit known as sarcomas and lymphomas and don't seem to be very thought of as breast cancers [1-5].

Although major varieties of breast carcinomas usually cause a lump within the breast, it is not seen in a few. It's additionally necessary to know that almost all breast lumps don't seem to be cancer, they're benign [6-13]. Benign breast tumors area unit abnormal growths, however they unfold outside of the breast and they are not lethal or result in end of life. However some benign breast lumps will increase a risk in the emergence of carcinoma under rare conditions. Any kind of breast lump must be examined by a health care supplier to work out whether or not it's benign or cancer, and whether or not it'd impact your future cancer risk [14-19].

Most of the lymph vessels of the breast drain into:

- Lymph nodes under the arm (axillary nodes).
- Lymph nodes around the collar bone (supraclavicular and infraclavicular lymph nodes)
- Lymph nodes inside the chest near the breast bone (internal mammary lymph nodes)

If cancer cells have unfold to your bodily fluid nodes, there's the next probability that the cells might have unfold (get metastasized) to alternative sites in the body. A lot of bodily fluid nodes with carcinoma cells, there is a lot of possible it's that the cancer is also found in alternative organs furthermore. Owing to this, finding cancer in one or a lot of bodily fluid nodes typically affects your treatment set up. Usually, surgery to get rid of one or a lot of bodily fluid nodes are required to understand whether or not the cancer has unfolded [20-27].

Still, not all ladies with cancer cells in their bodily fluid nodes develop metastases, and a few ladies do not have any cancer cells in their bodily fluid nodes and later develop metastases.

In detail to get aware regarding breast cancer, the various types among breast cancers are to be studied.

TYPES OF BREAST CANCERS

Breast cancers are separated into differing kinds based on the appearance of cancer cells under the magnification.

Most breast cancers are ductal carcinomas, a sort of cancer that starts within the cells (epithelial cells) that line organs and tissues just like the breast. In fact, breast cancer is typically a sort of cancer known as glandular carcinoma, where cancer starts in organ tissue. Alternative styles of cancers can occur within the breast, too, like sarcomas, that begin within the cells of muscle, fat, or animal tissue [28-32].

In some cases one breast neoplasm is a mix of various sorts or be a mix of invasive and in place cancer. And in some rarer styles of carcinoma, the cancer cells might not type a neoplasm in the least.

Breast cancer may also be classified based on supported proteins on or within the cancer cells, into teams like internal secretion receptor-positive or triple-negative.

Ductal carcinoma *in situ*

Ductal malignant neoplastic disease in place (DCIS; additionally referred to as intraductal carcinoma) is taken into account non-invasive or pre-invasive carcinoma. DCIS implies that cells that lined the ducts have modified to seem like cancer cells. The major difference between DCIS and invasive cancer is that the cells haven't unfold (invaded) through the walls of the ducts into the encircling breast tissue. As a result of it hasn't invaded, DCIS can't unfold (metastasize) outside the breast. DCIS is considered a pre-cancer as a result of some cases will maintain to become invasive cancers [33-39].

About one in five new carcinoma cases are DCIS. Nearly all girls diagnosed at this early stage of carcinoma may be cured.

Invasive (or infiltrating) ductal carcinoma

This is the foremost common form of carcinoma. Invasive (or infiltrating) ductal malignant neoplastic disease (IDC) starts in an exceedingly milk duct of the breast, breaks through the wall of the duct, and grows into the fat of the breast. At this stage the duct should be ready get metastasized (to unfold) to different elements of the body through the system lymphaticum and blood. Concerning eight of ten invasive breast cancers are infiltrating ductal carcinomas [40-46].

Male carcinoma may be a rare malignancy that accounts for roughly 1% of all malignancies in men. The approximated incidence is one in one hundreds and accounts for few than zero. 1% in cancer related deaths in men. Among the microscopic anatomy sorts, invasive ductal cancer is that the most common carcinoma in males, with incidence varied from sixty five to ninety fifth.

Male carcinoma has unimodal age-frequency distribution with peak incidence at age seventy one however often seen when the age of sixty. Conversely, girls carcinoma includes a bimodal age distribution with early-onset and late-onset peak incidences at fifty two and seventy two years recent, severally. The median age of identification in men is sixty five years recent, therefore men square measure diagnosed with carcinoma later than girls by five to ten years [47-52].

Inflammatory breast cancer

Inflammatory carcinoma (IBC) may be a rare and aggressive style of carcinoma. Inflammatory carcinoma sometimes starts with the reddening and swelling of the breast rather than a definite lump. IBC tends to grow and unfold quickly, with symptoms worsening among days or perhaps hours. It's necessary to acknowledge symptoms and obtain prompt treatment [53-57].

The average age at designation for inflammatory carcinoma within the us is fifty seven for white ladies and fifty two for African ladies. These ages are concerning five years younger than the typical ages at designation for different varieties of carcinoma. In line with the yankee Cancer Society, inflammatory carcinoma is a lot of common in African yankee ladies. A 2008 study found that being overweight makes an individual a lot of doubtless to develop IBC. Like different varieties of carcinoma, IBC may have an effect on men [58-64].

Lobular carcinoma *in situ*

Lobular malignant neoplastic disease in place (LCIS) is a district (or areas) of abnormal cell growth that will increase a person's risk of developing invasive carcinoma soon in life. Lobe means the abnormal cells begin growing within the lobules, the milk-producing glands at the top of breast ducts. Malignant neoplastic disease refers to any cancer that begins within the skin or alternative tissues that cover internal organs - resembling breast tissue.

In place or "in its actual place" means the abnormal growth remains within the lobe and doesn't unfold to close tissues. Individuals diagnosed with LCIS tend to own quite one lobe affected.

Despite the actual fact that its name includes the term "carcinoma," LCIS isn't a real carcinoma. Rather, LCIS is a sign that someone is at higher-than-average risk for obtaining carcinoma at some purpose within the future. For this reason, some consultants like the term "lobular neoplasia" instead of "lobular malignant neoplastic disease." A pathological process could be an assortment of abnormal cells [65-72].

LCIS is sometimes diagnosed before change of life, most frequently between the ages of forty and fifty. LCIS is very uncommon in men.

LCIS is viewed as an uncommon condition; however, we have a tendency not to recognize specifically what percentage individuals are being affected. That's as a result of LCIS doesn't cause symptoms and frequently doesn't show abreast of a X-ray photograph. It tends to be diagnosed as result of a diagnostic test performed on the breast for a few alternative reasons.

Male breast cancer

Breast cancer in men may be a rare ill-health. In 2016, about 2,600 men square measure expected to be diagnosed with the disease. For men, the life risk of being diagnosed with carcinoma is concerning one in one thousand [73,74].

Even though male individuals lack in the breast, they are likely to develop breast cancers. This can be explained as boys and ladies, men and girls all have breast tissue. The varied hormones in girls' and women's bodies stimulate the breast tissue to grow into full breasts. Boys' and restroom bodies unremarkably do not build a lot of of the breast-stimulating hormones. As a result, their breast tissue typically stays flat and tiny [75-79].

Because carcinoma in men is rare, few cases square measure offered to review. Most studies of men with carcinoma square measure terribly little. However once variety of those little studies square measure sorted along, we are able to learn additional from them.

Paget's disease of the nipple

Paget's disease of the reproductive organ may be a rare kind of carcinoma within which cancer cells collect in or around the reproductive organ. The cancer typically affects the ducts of the reproductive organ initial (small milk-carrying tubes), then spreads to the reproductive organ surface and therefore the areola (the dark circle of skin round the nipple). The reproductive organ and areola typically become scaly, red, itchy, and irritated [80-84].

According to the National Cancer Institute, Osteitis of the reproductive organ accounts for fewer than five-hitter of all carcinoma cases usually. Being conscious of the symptoms is very important, provided that quite ninety seven of individuals with osteitis even have cancer, either DCIS or invasive cancer, away within the breast. The weird changes within the reproductive organ and areola are typically the primary indication that carcinoma is gift [85-93].

Doctors don't seem to be nonetheless fully certain however osteitis develops. One chance is that the cancer cells begin growing within the milk ducts among the breast and so create their resolution to the reproductive organ surface. This might seem to elucidate why such a lot of individuals with osteitis of the reproductive organ have a second space of cancer among the breast. Another theory is that the cells of the reproductive organ itself become cancerous. This theory would make a case for the little range of individuals who: (1) solely have osteitis within the reproductive organ, or (2) have a second carcinoma that seems to be fully become independent from the Osteitis [94-97].

Phyllodes tumors of the breast

The name "phyllodes," has originated from the Greek and means "leaflike," refers to it indisputable fact that the neoplasm cells grow during a leafy pattern. Alternative names for these neoplasms square measure phylloides tumor and cystosarcoma phyllodes. Phyllode tumors tend to grow quickly, however they seldom unfold outside the breast.

Although most phyllode tumors are square in measure & are benign (not cancerous), some are square in measure & are malignant (cancerous) and a few square measure borderline (in between noncancerous and cancerous). All 3 forms of phyllodes tumors tend to grow quickly, and that they need surgery to scale back the chance of a phyllodes neoplasm returning within the breast (local recurrence).

Phyllodes tumors will occur at any age, however they have a tendency to develop once a woman is in her 40s. Benign Phyllode tumors tend to be square in measure sometimes diagnosed at a younger age than malignant phyllode tumors. Phyllode tumors do square measure very rare in men [98,99].

Recurrent and metastatic breast cancer

A return or continual carcinoma is carcinoma that has come once over an amount of time. The cancer could come within the same or opposite breast or chest wall.

It is a metastasis or pathological process where carcinoma unfolds to a different part of the body. Cancer cells will become independent from the first growth within the breast and visit alternative components of the body through the blood or the lymph system, which is a giant network of nodes and vessels [99-103].

The malignant tumor exceedingly completely is formed from an entirely different part/tissue from the cancerous cells or the malignant carcinoma precursors. Thus if carcinoma spreads to the bone, the malignant tumor within the bone is formed from carcinoma cells, not bone cells.

REMEDIES & TREATMENT

Any kind of cancer doesn't have a complete cure, which stands as a well-known fact, and among such breast cancer & its treatments are found to be relatively more successful in cure through treatment.

The treatment types in breast cancers usually are Chemotherapy; Hormone therapy; Biological therapy; Regular follow ups & Radiotherapy. Among these Hormone therapy & Radiotherapy are not so successful when put against the remaining. Chemotherapy is found to be the most successful method for treatment.

REFERENCES

1. Naeini EE, et al. The Effectiveness of Stress Management Training on Hardiness in Patients with Breast Cancer. *Abnorm Behav Psychol.* 2016;2:115.
2. Hara F, et al. Randomized, Optimal Dose Finding, Phase II Study of Tri-Weekly Nab-Paclitaxel in Patients with Metastatic Breast Cancer (ABROAD). *J Clin Trials.* 2016;6:267.
3. Lagiou M, et al. Molecular Analysis of RASSF1 Gene Methylation and mRNA Expression in Sporadic Breast Cancer. *Clin Med Biochemistry Open Access.* 2016;2: 118.
4. Bila A and Gramatiuk S. To Compare the Mitochondrial Complex between Metastasis Breast Cancer and Patients with Breast Cancer and Hepatitis C Virus. *J Women's Health Care.* 2016;5:315.
5. Kinoshita S, et al. Clinicopathological Assessment of Patients with Locally Advanced Breast Cancer with 10 or More Lymph Node Metastases. *Breast Can Curr Res.* 2016;1:107.
6. Omran M, et al. A Prospective Pharmacokinetic Study of Docetaxel in Breast Cancer Patients in Relation to CYP3A4 Activity. *Clin Pharmacol Biopharm.* 2016;5: 156.
7. Omran M, et al. A Prospective Pharmacokinetic Study of Docetaxel in Breast Cancer Patients in Relation to CYP3A4 Activity. *Clin Pharmacol Biopharm.* 2016;5: 156.
8. Li T, et al. Combination of Nab-Paclitaxel with Trastuzumab as Neoadjuvant Chemotherapy for HER2-positive Breast Cancer Patients: Experience from a Single Center. *Clin Exp Pharmacol.* 2016;6:209.
9. Osman U and Gilbert CR. Bronchial Necrosis Following Bevacizumab and Stereotactic Body Radiotherapy for Treatment of Metastatic Breast Cancer. *J Pulm Respir Med.* 2016;6: 345.
10. Grondona JP, et al. Hepatic Resection for Breast Cancer Liver Metastases. *J Cancer Clin Trials.* 2016; 1:110.
11. Gayatri Devi V, et al. Therapeutic Potentials of CD151 shRNA in Targeting Metastasis of Triple Negative Breast Cancer Cell Line MDA-MB-231. *J Cancer Sci Ther.* 2016;8:400.
12. Álvarez-Bañuelos MT, et al. Prognostic Factors Associated with Survival in Women with Breast Cancer from Veracruz, Mexico. *J Cancer Sci Ther.* 2016: 8: 398.
13. Ahmed S, et al. Effect of Surgery and Adjuvant Therapy in Reproductive and Sexual Dysfunction in Pre-menopausal Women with Breast Cancer. *Reprod Syst Sex Disord.* 2016;5: 169.
14. Martínez-Campa C, et al. (2016) Melatonin: Antiproliferative Actions, Protection of Normal Tissue and Enhancement of Radiosensitivity of Breast Cancer Cells. *J Cell Sci Ther.* 2016; 7:241.
15. Márquez-Rosales MG, et al. Association of the rs2279744 Promoter Polymorphism in the MDM2 Gene with Breast Cancer in a Mexican Population (DSD) Resulting in Female Sex Reversal in 46XY Males. *Hereditary Genet.* 2016;5:165.

16. Moses SL, et al. Cytotoxicity in MCF-7 and MDA-MB-231 Breast Cancer Cells, without Harming MCF-10A Healthy Cells. *J Nanomed Nanotechnol.* 2016;7:369.
17. Dogan S, et al. The Detection of Extremely High and Low Expressed Genes by EGEF Algorithm in Invasive Breast Cancer. *J Biom Biostat.* 2016; 7: 286.
18. Rios SSD, et al. Wearing a Tight Bra for Many Hours a Day is Associated with Increased Risk of Breast Cancer. *Adv Oncol Res Treat.* 2016;1: 105.
19. Luo S, Li Q, et al. Two Novel Curcumin Analogues Induced Reactive Oxygen Species Generation and Mitochondrial-Related Apoptosis in Human Breast Cancer MCF - 7 Cells. *J App Pharm.* 2016;8:215.
20. Ian SF. Medico-legal Aspects of Delay in Diagnosis of Breast Cancer. *Can Surg.* 2016;1: 103.
21. Taira N, et al. Cohort Study of Secondary Endocrine Therapy in Metastatic Breast Cancer with a Poor Response to Initial Endocrine Therapy. *J Clin Trials.* 2016;6:260.
22. Entesab AHM. How do Breast Cancer Mortality Rates Differ between Women who are Screened Annually and Biennially by Mammography?. *J Gen Pract.* 2016;4:244.
23. Ohnaru K, et al. Atypical Femoral Fracture in a Patient with Metastatic Breast Cancer During Denosumab Therapy. *J Clin Case Rep.* 2016;6:737.
24. Shokoufi M, et al. Periodic Dynamic Thermography for Breast Cancer Assessment. *J Bioeng Biomed Sci.* 2016;6:181.
25. Zribi M and Boujelbene Y. The Neural Networks with an Incremental Learning Algorithm Approach for Mass Classification in Breast Cancer. *Biomedical Data Mining.* 2016;5: 118.
26. Târcoveanu E, et al. Particularities of Primary Breast Cancer in Men. *Journal of Surgery.* 2016;12:29-35.
27. Aydin AS, et al. A Rare Case of Primary Breast Cancer with Isolated Renal Parenchymal Metastasis Mimicking Primary Renal Cell Carcinoma. *J Clin Case Rep* 6:724.
28. Lucibello M and De Braud F. Phospho-TCTP and Dihydroartemisinin: A Novel Therapeutic Opportunity in Advance Breast Cancer. *Chemo Open Access.* 2016;5:196.
29. García-Novoa A and Acea-Nebril B. Controversies in Axillary Treatment of Breast Cancer Patients and Metastatic Sentinel Lymph Node. *J Cancer Sci Ther.* 2016;8:066-068.
30. Ofor O, et al. CTCF May Not Directly Regulate ERα mRNA Expression in the ER+ MCF7 Breast Cancer Cell Line. *J Cancer Sci Ther.* 2016;8:391.
31. Shahbazi S, et al. Semiempirical Investigation of the Postmenopausal Breast Cancer Treatment Potential of Xanthone Derivatives. *Nat Prod Chem Res.* 2016;4:206.
32. Olaya N, et al. Bovine Leukemia: Zoonosis Associated with Breast Cancer in Humans?. *J Med Surg Pathol.* 2016;1:110.
33. Minafra IP, et al. (2016) Proteomic Profiling of In-Vitro Bone-Conditioned Skbr3 Breast Cancer Cells. *J Proteomics Bioinform.* 2016;9: 392.
34. Mukherjee G, et al. Analysis of Clinico-Pathological Characteristics of Indian Breast Cancers Shows Conservation of Specific Features in the Hormone Receptor Sub-Types. *J Integr Oncol.* 2016;5:159.
35. Akihiko Osaki. Adjuvant Chemotherapy with S-1 in Breast Cancer Patients after Primary Systemic Chemotherapy. *Chemo Open Access.* 2016;5:187.
36. Ondimu TO, et al. Factors that Influence the Uptake of Breast Cancer Screening among Secondary School Student: Case of Kisii South Sub-County Kenya. *Oncol Cancer Case Rep.* 2016;2:109.
37. Smichkoska S and Lazarova E. Long Term Trastuzumab in Metastatic Setting of the Patients with HER2 Positive Breast Cancer. *J Blood Lymph.* 2016;1:103.
38. Colone M, et al. Redox-active Microcapsules as Drug Delivery System in Breast Cancer Cells and Spheroids. *J Mol Genet Med.* 2016;10:200.

39. Kadmon I. Breast Cancer - A Developing Paradigm of Nursing Care in Israel. *J Nurs Care*. 2016;5:331.
40. Grech G, et al. Molecular Classification of Breast Cancer Patients Using Formalin-fixed Paraffin-embedded Derived RNA Samples. *J Mol Biomarkers Diagn*. 2016;S8:016.
41. El-Lathy HA, et al. The Impact of Pretreatment 18F-FDG (PET/CT) Maximum Standardized Uptake Value and Neutrophil/Lymphocyte Ratio (NLR) in Predicting Prognosis in Surgically Treated Oligometastatic Breast Cancer Patients. *J Nucl Med Radiat Ther*. 2015;7:271.
42. Wang HH, et al. Long-Term Survivors of Breast Cancer: Religious Influence. *J Nurs Care*. 2016;5:324.
43. Kabel AM, et al. Ameliorative Potential of Tamoxifen/Thymoquinone Combination in Patients with Breast Cancer: A Biochemical and Immunohistochemical Study. *Cancer Med Anticancer Drug*. 2016;1:102.
44. Jehn CF, et al. Impaired Thinking in Patients with Breast Cancer and Depression. *J Palliat Care Med*. 2016;6:248.
45. Bates E and Wallace DR. Differential Effects of Organic and Inorganic Mercury on Phenotypically Variant Breast Cancer Cell Lines. *J Clin Toxicol*. 2015;5:273.
46. Jyoti BS. Accuracy of MRI for Prediction of Response to Neo-Adjuvant Chemotherapy in Triple Negative Breast Cancer Compared to Other Molecular Types. *Chemo Open Access*. 2015;5:175.
47. Castillo AF, et al. Gene Expression Profile and Signaling Pathways in MCF-7 Breast Cancer Cells Mediated by Acyl-Coa Synthetase 4 Overexpression. *Transcriptomics*. 2015;3:120.
48. Vohra LM and Siddiqui T. Metaplastic Breast Cancer and p16 Positivity: What Does It Mean?. *J Carcinog Mutagene*. 2015;6:244.
49. Akasbi Y, et al. An Unusual Case of Multiple Primary Carcinomas: Breast Cancer and Rectal Adenocarcinoma in a Single Patient: Report of a Case and Review of the Literature. *Arch Surg Oncol*. 2015;1:107.
50. Zhong GX, et al. The Molecule Mechanisms of Bone Metastasis in Breast Cancer. *J Orthop Oncol*. 2015;1:102.
51. Steponkiene S, et al. Accumulation and Distribution of Non-targeted and Anti-Cd44-conjugated Quantum Dots in Distinct Phenotypes of Breast Cancer. *J Nanomed Nanotechnol*. 2015;6:341.
52. Xuehua Xu. Molecular Mechanisms Underlying Chemotaxis in the Model System Dictyostelium discoideum and Mammalian Neutrophils and Breast Cancer Cells. *Cell Dev Biol*. 2015;4:e135.
53. Das U, et al. Breast Cancer in Women of Younger than 35 Years: A Single Center Study. *J Mol Biomark Diagn*. 2015;6:261.
54. Basu A and Moirangthem A. Advances of Non-Surgical Therapy for Different Molecular Subtypes of Breast Cancer. *Adv Genet Eng*. 2015;4:132.
55. Vargens OMC and Berterö CM. Defining Contentment in Quality of Life in the Context of Breast Cancer Experience: A Meta-Synthesis. *J Palliat Care Med*. 2015;5:239.
56. Das SK and Ratna A. Endothelin: Ominous Player in Breast Cancer. *J Cancer Clin Trials*. 2015;1:e102.
57. Singh A and Arora D. A Case of Breast Cancer Recurrence at the "Match Line". *J Blood Lymph*. 2015;1:101.
58. Yadav AK and Jha V. Metagenomic Analysis of Molecular Profile of Breast Cancer Using Genie a Literature Based Gene Prioritizing Tool: A Novel Approach. *Adv Tech Biol Med*. 2015;3:147.
59. Koo J and Schramm L. Soy and Breast Cancer, have we Analyzed all the Risks?. *J carcinog Mutagene*. 2015;6:e117.
60. Bahri S, et al. Initial Experience of Monitoring Response of Breast Cancer to Bevacizumab-containing Chemotherapy using A New Integrin Specific PET Imaging Tracer [F-18]RGD-K5. *J Mol Imag Dynamic*. 2015;5:116.

61. Noro J, et al. Evaluation of New Naphthalimides as Potential Anticancer Agents against Breast Cancer MCF-7, Pancreatic Cancer BxPC-3 and Colon Cancer HCT-15 Cell Lines. *Organic Chem Curr Res.* 2015;4:144.
62. Puckett Y, et al. (2016) Does Offering Free Breast Cancer Screenings Make a Difference?— A Retrospective 3-Year-Review of a West Texas Free Breast Cancer Screening Program. *J Cancer Diagn.* 2015;1:101.
63. Chernyy VS, et al. Expression of Steroid Receptors and Cytokeratin 18 in Breast Cancer after Neoadjuvant Chemotherapy. *J Mol Biomark Diagn.* 2015;S2:013.
64. Jayanthi M, et al. Study on Blood Parameters of Tetrahydropyrimidine Carboxamide Derivatives on Breast Cancer. *J Develop Drugs.* 2015;4:135.
65. Yeh CH, et al. Auricular Point Acupressure (APA) to Manage a Symptom Cluster of Pain, Fatigue, and Disturbed Sleep in Breast Cancer Patients: A Pilot Study. *J Pain Relief.* 2015;4:199.
66. Messersmith L, et al. Utilization of the Breast Cancer Risk Assessment Tool in the Identification and Screening of Women at Increased Risk of Breast Cancer. *J Women's Health Care.* 2015;4:259.
67. Minh Nam N. Gene Signature: A Guideline for Hormonal Therapy in Breast Cancer. *J Steroids Hormon Sci.* 2015;6:e115.
68. Liang DH, et al. Autophagy Inhibition to Increase Radiosensitization in Breast Cancer. *J Nucl Med Radiat Ther.* 2015;6:254.
69. Dani M, et al. A Long Breast Cancer Remission without Standard Therapy. *J Clin Case Rep.* 2015;5:569.
70. Wimalasena J, et al. Roles of BCL-2 and BAD in Breast Cancer. *J Clin Cell Immunol.* 2015;6: 352.
71. Chai S and Fan P. Mechanistic Progress of Estrogen-induced Apoptosis in Estrogen-deprived Breast Cancer Cells. *J Cell Sci Ther.* 2015;6:218.
72. Roy M, et al. Sulforaphane Inhibits Metastatic Events in Breast Cancer Cells through Genetic and Epigenetic Regulation. *J Carcinog Mutagen.* 2015;6:231.
73. Timpe LC, et al. Mining the Breast Cancer Proteome for Predictors of Drug Sensitivity. *J Proteomics Bioinform.* 2015;8: 370.
74. Lombardi MG, et al. Cholinergic Actions of Autoantibodies from Breast Cancer Patients on Dendritic Cells. *J Clin Cell Immunol.* 2015;6:340.
75. Petersen I and Kollek R. The Symbolic Relevance of Feedback: Return and Disclosure of Genomic Research Results of Breast Cancer Patients in Belgium, Germany and the UK. *J Clinic Res Bioeth.* 2015;6:230.
76. Mezzaroma E, et al. Disentangling the Mechanisms of Radiation-Induced Heart Disease in the Treatment of Breast Cancer. *Transl Med.* 2015;5:152.
77. Xiangpo P, et al. Current Evidence on the Association between Four Polymorphisms in the Matrix Metalloproteinases (MMP) Gene and Breast Cancer Metastasis. *J Environ Anal Chem.* 2015;2:151.
78. Lorca AM, et al. Value of 18F-FDG-PET/CT Initial Staging in No Metastatic Breast Cancer with Poor Prognostic Factors. *OMICS J Radiol.* 2015;4:201.
79. El-Lathy HA, et al. The Prognostic Role of Pretreatment 18F-FDG (PET/CT) Maximum Standardized Uptake Value in Multiple or Oligometastatic Breast Cancer Patients. *J Nucl Med Radiat Ther.* 2015;6:236.
80. Rawat K, et al. BTF3-Promoter Based In Vitro Screening of Anti- Human Breast Cancer Compounds. *Clin Exp Pharmacol.* 2015;5:183.
81. Retsky M. Omics Conferences and Breast Cancer in Sub-Saharan Africa. *J Bioequiv Availab.* 2015;7:e66.

82. Porchia LM, et al. Common BRCA1 and BRCA2 Mutations among Latin American Breast Cancer Subjects: A Meta-Analysis. *J Carcinogene Mutagene*. 2015;6:228.
83. Abdulrahman GOJ. Targeted Therapies in the Management of Breast Cancer. *J Integr Oncol*. 2015;4:137.
84. Hall JM and Robinson ML. Peroxisome Proliferator-Activated Receptor γ as a Therapeutic Target in Human Breast Cancer. *J Steroids Hormon Sci*. 2015;6:155.
85. Nahleh Z and Otoukesh S. Celebrating Cancer Survivorship- A focus on Breast Cancer. *J Psychol Psychother*. 2015;5:182.
86. Liu G, et al. Comparisons of the Clinicopathological Characteristics and the Expression of Tumor Biomarkers among Luminal, HER2-Enriched and Triple Negative Breast Cancer. *Gen Med (Los Angel)*. 2015;3:184.
87. Zhu C and Cui L. The Role of Ahr in Anticancer Drug Resistance in Breast Cancer. *J Bioanal Biomed*. 2015;7: 129
88. Charushila YK and Subodhini AA. Evaluation of Serum Antioxidants during Adjuvant Chemotherapy of Breast Cancer- A Prospective Observational Study. *Biochem Anal Biochem*. 2015;4:171.
89. Khosroshahi ME, et al. In-vitro Application of Doxorubicin Loaded Magnetoplasmonic Thermosensitive Liposomes for Laser Hyperthermia and Chemotherapy of Breast Cancer. *J Nanomed Nanotechnol*, 2015;6:298.
90. Yu X, et al. TGF beta Exposure Promotes Acquisition of Epithelial-like Phenotype in Breast Cancer Spheres. *J Cytol Histol*. 2015;S3:014.
91. Stötzer OJ, et al. Circulating Cell Free DNA as Blood Based Biomarker in Breast Cancer. *Mol Biol*. 2015;3:120.
92. Reure J, et al. Her2 Positive Metastatic Breast Cancer Patient without Any Sign of Recurrence 5 years after Cessation of Trastuzumab: A Case Report. *Clin Pharmacol Biopharm*. 2015;4:136.
93. Andrea CG and Luca FG. Complete Response in Patient with Metastatic Breast Cancer Treated with Metronomic Chemotherapy. *J Blood Lymph*. 2015;5:136.
94. Weiming Xu. Targeting Membrane-Bound GRP78 Protein (Arrow) on the GFP-labelled Breast Cancer Cell Surface (Green) by the Quantum Dot-Conjugated Anti-GRP78 ScFv Antibody (Red). *Single Cell Biol*. 2015;4:i101.
95. Ahmad A, et al. Nanosomal Paclitaxel Lipid Suspension Demonstrates Higher Response Rates Compared to Paclitaxel in Patients with Metastatic Breast Cancer. *J Cancer Sci Ther*. 2015;7: 334.
96. Garrison JB, et al. Knockdown of the Inhibitor of Apoptosis BRUCE Sensitizes Resistant Breast Cancer Cells to Chemotherapeutic Agents. *J Cancer Sci Ther*. 2015;7:335.
97. Jones B, et al. A Comparison of Incremental Costs of Breast Cancer Clinical Trials to Standard of Care. *J Clin Trials*. 2015;5:216.
98. Sennerstam RB and Strömberg JO. Genomic Instability or One-Gene Theory for Tumor Progression: A Breast Cancer Study. *J Carcinogene Mutagene*. 2015;6:223.
99. Hamid GA, et al. Triple-Negative Breast Cancer; Future Treatment in Limited Resource Centers. *J Develop Drugs*. 2015;4:e141.
100. Zang G, et al. Preventing Breast Cancer Growth by Cationic Cecropin B. *Biol Syst*. 2015;2:112.
101. Bourton EC, et al. Radiosensitivity of Human Breast Cancer Cell Lines Expressing the Breast Tumor Kinase (Brk). *J Cancer Sci Ther*. 2015;7:331.
102. Cao Q, et al. Pulmonary Metastasis on TC-99m MDP Bone Scan Mimicking Metastatic Rib Lesions in Breast Cancer. *J Nucl Med Radiat Ther*. 2015;6:213.

103. Koumarianou A, et al. How to Encounter the Development of Panic Disorder During Adjuvant Breast Cancer Chemotherapy: A Case Study. *J Clin Case Rep.* 2015;4:475.